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JAMES PARKINSON.*

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English born and bred, an English physician and scientist,^[33] forgotten by the English and by the world at large—such is the fate of James Parkinson.

To Mary, wife of John Parkinson, a son was born on the 11th of April, 1755. On the 29th day of the same month the child was baptized and named James. These facts are recorded in St. Leonard's Shoreditch Parish Register, Middlesex. I was unable to find the date of his birth noted in any biography.

Concerning the life of John Parkinson, father of James, nothing is known. However, while searching the old Shoreditch parish churchyard last summer for the tombstone of James Parkinson, a stone was discovered, from which time has almost erased the inscription, but upon that part of the stone which is protected by an overhanging roof or sheltering hood the following can yet be readily seen:

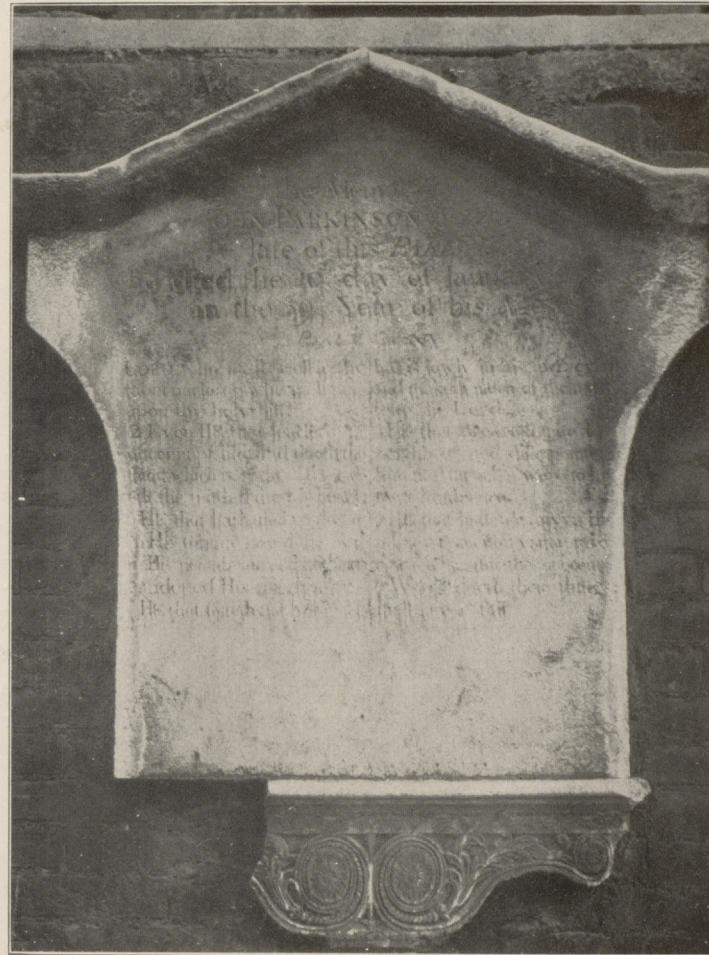
To
the Memory of
Jno. Parkinson, Surgeon
late of this Parish
who died on the 10th
day of Jan. 1784, in
the 69th year of his age.

An inscription of twelve lines originally followed this but the passing years have so completely effaced it, that at present only an occasional letter or word can be deciphered.

* Paper read before The Johns Hopkins Hospital Historical Society, May 8, 1911.

[33] This, however, is enough; and sufficient to indicate that Parkinson was born into a family of some standing and culture and that his father lived long enough to arrange for and

[34]



TOMBSTONE OF JOHN PARKINSON.

[33] to personally supervise his medical as well as his preliminary education.

The family lived at No. 1 Hoxton Square, in the borough of Hoxton, which at present constitutes part of the East

Centre of London. Formerly, Hoxton Square, surrounded [33] by the homes of wealthy families was a most desirable residential locality. It boasted of its residents, its homes, its carriages, its servants and of all that accompanies culture and wealth.

Hoxton Square was formerly a parish square, only the residents on the square being privileged to enjoy its attractions,

[34]



No. 1 HOXTON SQUARE.

each family having a key whereby admittance was gained. It [33] was an attractive place. There still stands in this park, close to Parkinson's home, an immense and beautiful plane-tree, an Oriental *ansifolia*, which has attained the age of 150 years.

[133] Parkinson must have known it in his youth, it grew up with him, and he must have learned to love it. Today, however, Hoxton is a public square, open to all, not surrounded by homes of the wealthy but by all varieties of small factories [134] and work shops. Marble masons, mattress makers, French polishers, cabinet manufacturers, carvers and gilders, leather embossers, drafters, plate and sheet glass makers, now occupy and carry on their work in what were formerly the homes of the wealthy and influential.

The old house at No. 1 Hoxton Square still exists. From without it has partaken of the fate that has befallen the neighborhood and suggests only age, neglect, poverty and even squalor, but from within it recalls days of prosperity, of culture and even of luxury.

The house is a plain old three story building facing the east, on the northwest corner of Hoxton Square. Behind the main building and connected with it is a smaller two-story one with a central door opening into the little side street. This apparently was Parkinson's office. Behind this again is another smaller building which may have served as a laboratory, as a library, or perhaps as a museum. Leading up to the deeply set, black, massive looking front door are a stone walk and deeply worn stone steps. The house is only a few feet back from the street and before it stands an old iron fence.

Uninteresting though the exterior is, upon entering this building one is impressed at the large size of the rooms and with the evidences of the prosperity of other days. We see in almost every room great carved open fire-places of elaborate design, and between some rooms large connecting arches. The deep panelling of walls and ceiling which was formerly so much in vogue is well preserved in some of the rooms on the second floor. One is surprised to find such an interesting interior behind such an uninviting exterior.

Parkinson, then, was brought up in a medical atmosphere in the midst of pleasant surroundings, inheriting his father's tastes and in all likelihood his practice, for we are informed that he, James, was already in active practice in 1785 during which year he attended Hunter's course of lectures on surgery.

His father's death occurring in 1784 makes it more than [34] probable that the practice passed from the father to the son. This probability is increased from the fact that his entire life was spent in the same neighborhood, all of his books being dated from Hoxton Square and his death occurring in Kingsland Road, but a few hundred yards from Hoxton Square.

Concerning his medical education we know little, but from a perusal of his little book entitled "The Hospital Pupil" much can be inferred both as to his preliminary and as to his medical education. The title page reads:

THE HOSPITAL PUPIL
or

Observations addressed to the parents of youths intended for the profession of medicine or surgery on their previous education, pecuniary resources and on the order of their professional studies with *Hints to the young pupil* on the prosecution of hospital studies, on entering into practice and on medical jurisprudence. (Written in reply to an appeal for advice from a friend educating a son.) 1800.

Parkinson here insists on the necessity of a suitable temperament and a correct attitude of the student towards the study of medicine.

After the common school education the student should possess a knowledge of Latin and of natural philosophy. As he says:

The grand object which next calls for consideration is what is the best situation in which a youth can be placed and what is the mode of study, which will most certainly secure him all the theoretical and practical knowledge, in the science of healing, which, may be obtained under the excellent arrangement for professional studies, with which the metropolis abounds.

According to the present system, the first care of the parent who has a son whom he intends shall be educated in both branches of the healing art, is to find out some gentleman of respectability who is properly established as a surgeon and apothecary. With him, paying a proper premium, he fixes his son, who has received a common school education, as an apprentice for seven years. At the end of this period he is in general, sent to one of the hospitals in the metropolis, where he attends the lectures, and witnesses the practice of the hospital for a

[35] twelvemonth or even less time, and, then if a favorable opportunity offers, takes charge of the health of some populous neighborhood.

Now, on full conviction, I assert, that of all the modes which could be devised for a medical and chirurgical education, this is the most absurd: and is the one which would most certainly exclude a young man from the chance of acquiring that knowledge, which the important situation he is about to fill, so imperiously demands.

When I consider that this has been the plan of education adopted for many of those gentlemen who with so much credit to themselves and advantage to their employers, practice both branches of the profession, in every part of the country, and that it is the mode of education which is almost universally adopted, I can not but be thoroughly aware of the consequences of the assertion that I make. It is indeed much more calculated to provoke contradiction than to obtain assent. This consideration does not, however, prevent its being hazarded, nor should it, since the opposition, I expect it may experience, will point out the great number of those who think differently from me, and who require, I venture to believe, to be freed from the delusions of a mischievous error.

The first four or five years are almost entirely appropriated to the compounding of medicines, the art of which with every habit of necessary exactness, might be just as well obtained in as many months. The remaining years of his apprenticeship bring with them the acquisition of the art of bleeding, of dressing a blister and for the completion of the climax—of exhibiting an enema.

Many young men with their minds thus sparingly cultivated are sent to the hospitals in the metropolis where in consequence of the previous mismanagement of their education, the plan of instruction, otherwise so well contrived loses all its advantages and appears with respect to such students to be fraught with equal absurdity with that which preceded it.

When the student is limited to a short term of hospital practice and does not possess extraordinary abilities and industries, the whole of that period on which his future prosperity and his ease of conscience must depend may slide away only furnishing him with a knowledge of the multiplicity of subjects of which though he is convinced they are absolutely necessary to be known, he finds himself miserably ignorant.

He then discusses the need of a preliminary training either in a university or under a private tutor and insists on the need of Latin, Greek and shorthand. In the medical course

he advises: during the first year—Attendance at a course of [35] anatomical lectures together with some knowledge of the several branches of natural philosophy; in summer read anatomy and physiology in Latin, chemistry, physics, French and German. 2d year: Anatomical lectures, physiology, practical anatomy; in summer read Haller, Monroe, Blumenbach, Bichat and Cullen, also some chemistry, natural philosophy, surgery and *materia medica*. 3d year: Attend clinical lectures. 4th year: Morbid anatomy, clinical work. 5th year summer: Serve as a dressing pupil, see clinical work and attend lectures. He concludes “Thus with no more expense, four or five years advance in knowledge would be obtained, the advantage of which through life must be immeasurable. In a word, I am confident that for a young man intending to practice both professions, no apprenticeship will be advisable except to a hospital, and that the advantages of attaching him to a hospital in the manner I have proposed are incalculable.”

The second part of the book consists of advice and a plan of study in order that as much advance as possible can be made within the small space of twelve months.

A footnote on page 144 embodies the ideals of the council on pharmacy:

In this age of science and beneficence, it is surprising that no public-spirited and wealthy men have stepped forward to form an association and establish a fund for the purpose of ascertaining the actual properties of every nostrum, of promoting the recompense of any one who published any useful discoveries in medicine, and of furnishing with counsel, and, the means of prosecution, those whose healths have been injured and whose properties have been stolen by ignorant pretenders to medicine, whether under the characters of advertising quacks, cancer curers or regulars.

The tone of this book suggests that Parkinson was speaking of the advantages of the hospital apprenticeship from his own personal experience and his other various publications lead one to infer that he had also had the preliminary education here advised.

When twenty-six years of age he married Mary Dale in St. Leonard's Shoreditch Church on May 21, 1781. On

[35] February 11, 1783, a son, James J., was born. A second son, John William Keys Parkinson, was born on July 11, 1785. He grew up, was educated for and practiced medicine, becoming in 1834 a fellow of the Royal College of Physicians. After his father's death he continued the practice at No. 1 Hoxton Square and in 1833 published a book entitled "Hunterian Reminiscences," which was really Hunter's course of lectures on surgery which had been taken down verbatim in shorthand by his father in 1785 and later transcribed. As to the other children we learn from consulting his will that James Parkinson had at least one other son and two daughters.

The name Keys, given his son in 1783, considered in connection with his will written forty years later, in which John Keys is named as an executor and as a beneficiary shows plainly that Parkinson enjoyed with Keys a long and deep friendship which lasted from his early life until his old age. In Mr. Parkinson's examination before the Privy Council¹ he was questioned concerning a certain Mr. Keys, a counselor, without doubt the same Keys. The fact that in the will Parkinson's sister is called Mary Keys would suggest that Keys had married Parkinson's sister. Be that as it may, Parkinson enjoyed one of the greatest assets in life—a true life-long friend, concerning whom I have been unfortunately unable to discover any further particulars.

The wide-spread nature of Parkinson's interest in life was early manifested in his great activity in various directions. His clinical work did not deter him from entering other fields of thought and learning, and wherever he entered his attitude was that of fearlessness and confidence. He always attacked that which appeared wrong to him regardless of what and of whom it involved.

He partook of the spirit of the troublesome times in which he lived. He was a reformer, a radical. Born during the progress of the seven years' war, he lived during the most restless period in modern history. He saw the American fight for independence and witnessed the formation of the great new republic. He lived through the period when France

¹ *Vide infra.*

was in the grip of the revolutionists, through the reign of [36] terror, the days of Marat, Charlotte Corday, Marie Antoinette, Danton and Robespierre—days of the guillotine. He saw Napoleon carry war into every land and he probably celebrated in the great rejoicings following Trafalgar and Waterloo.

He linked arms with other reformers although the nature of the times made such action dangerous. Behind closed doors he met with them, discussed and planned for the dawn of better days for England. He was a member of secret societies whom the government feared and constantly watched. He was not content with planning but wrote on reform, his writings being eagerly read by thousands of dissatisfied spirits who though recognizing that conditions were not right, did not know who was to blame or how redress could be obtained.

In 1794 he wrote a pamphlet entitled "Revolutions without Bloodshed; or Reformation Preferable to Revolt." He opens by saying:

It having been industriously asserted that the happiness and prosperity of the people would not be at all increased by a Reform of the Representation, it has been thought proper to publish the following enumeration of those changes which in all probability might be thereby produced.

I.

The Claims of the People might be more duly attended to and their Rights restored.

II.

Taxes might be proportioned to the abilities of those on whom they are levied, and not made to fall heavier on the poor than the rich.

III.

The present system of Excising almost all the necessities of life, as soap, candles, starch, beer, etc., etc., might be abolished.

IV.

The Poor Laws and Laws of Settlements might be amended, and a poor man not be liable to be sent to prison for moving out of his own parish to seek employment.

The Game Laws might be abolished, and the farmer be no longer obliged to permit his rich and insolent neighbor to trample his fields in pursuit of an animal, which, though fed by the produce of his own grounds, the farmer himself dares not kill, but under the penalty of fine and imprisonment

VI.

Workmen might no longer be punished with imprisonment for uniting to obtain an increase of wages, whilst their masters are allowed to conspire against them with impunity.

VIII.

Some proportion might be preserved between Crimes and Punishments and the starving purloiner of a few shillings not suffer the same punishment as a murderer.

IX.

The Clergy might be provided for by an income more regularly proportioned, and levied in a more agreeable and respectable mode. A part of the vast revenues of the Bishops might relieve our numerous starving Curates.

XIII.

Families that are comparatively starving might be exempted from contributing towards the enormous sums squandered in unmerited Salaries and Pensions

XVIII.

The blessings of Peace might not be exchanged for the miseries of War, with the wicked but vain hope of riveting chains on thirty millions of men, who had resolved to be free.

XIX.

Young men might no more be trapanned from their friends to perish in the field of infamy and murder.

XX.

Our Sailors might not be dragged like felons into a service they dislike, and made accomplices in slaughter.

XXII.

Difference of Opinion in Religious Matters might not exclude men from enjoying the same benefits with their Fellow-Citizens.

XXIV.

The Expenses of the Nation might not then exceed, as they now do, the enormous sum of 80,000 £ a day—3000 £ an hour—50 £ a minute. Etc., etc.

Among other secret societies he was a member of the London Corresponding Society. Shortly after the imprisonment of Hardy, Tooke, Thelwall, Burke, etc., several members of the London Corresponding Society were placed under arrest and charged with complicity in what was termed the Pop-gun Plot. It was charged that the members of this society had formed a plot to murder George III of England. This was to be accomplished by shooting the king, during a play in the theatre, with a poisoned arrow discharged from a pop-gun.^[36] It was also charged that the society was importing four thousand pikes from abroad and that they intended starting a revolution. Several members were seized, thrown into prison and there detained for months without being brought to trial.

Although an active member, Parkinson was not apprehended. No sooner, however, were the arrests made than he became very active, writing a long pamphlet entitled "A Vindication of the London Corresponding Society," in which he maintained the innocence of those accused and clamored against the suspension of the Habeas Corpus Act and further detention of those imprisoned without trial. He also became interested in raising subscriptions for the wives and children of the imprisoned members of the society.

In order to assist his friends in distress Parkinson did every thing in his power to have the Privy Council take some definite action. His part in the affair is clearly stated in a long letter written to Mr. Smith, one of the imprisoned. This letter appeared in 1795 in a pamphlet entitled "Assassination of the King!" In which he shows his fearlessness, but respect for the laws; also his pity for the incarcerated, and his righteous indignation with the lack of consideration and cruelty shown them.

The first intelligence I received of your being apprehended was from the newspapers. Although I sincerely regretted the situation in which you and your fellow-sufferers were placed, I could not forbear laughing at the account of a plot said to have been formed by men, whom I knew were at enmity with each other; and which proposed the destroying of the King, in so public a place as the play-house, by an arrow, which was to be armed with a miraculous poison, and to be discharged from an

[37] air-gun, leisurely levelled for aim, in the midst of a crowded audience. I concluded such a story could not obtain a moment's credit, and expected your immediate discharge.

But when I learnt that the Privy-council were proceeding with as much solemnity in their examinations, as if their political, I mean their *official* situations, were at stake, I began to suspect they had been *alarmed* into belief of the silly tale. This suspicion was, however, soon dismissed, and the more probable conjecture forced itself on my mind—that the Ministry had seized on this absurd accusation as a fortunate circumstance, which, if properly managed, might excite a sufficient degree of *fresh* alarm, to induce the public at large, but more particularly the Grand Jury, who were then sitting in examination of the bills prepared against Messrs. Hardy, Tooke, Thelwall, etc., to believe that *Treason* was actually abroad. I endeavored in vain to chase from my mind that you and your fellow-prisoners were to be held out to the world as liable to be *hanged, drawn, and quartered*, for your *imputed* crimes, the more certainly to secure to Messrs. Hardy, Tooke, Thelwall, etc., the same punishment, for copying the best action of the whole of the political lives of those apostates, Mr. Pitt and the Duke of Richmond.

Convinced of your innocence, and willing that ministers should not have it in their power to plead ignorance, I resolved to state those circumstances which had produced that conviction, to the Privy-council. I therefore had their Lordships informed, that I was willing, even on oath, to inform them of such facts as had come to my knowledge respecting your connection with Upton, your accuser

* * * * *

Immediate on being called into the Council-chamber, one of the clerks, in consequence of a sign made by Mr. Pitt, put a book into my hand; upon opening it and discovering it was the New Testament, I closed it again and laid it upon the table. Mr. Pitt rising immediately from his seat, and addressing me rather sternly, said, 'What is that for, Sir?' and to the clerk, in an imperative tone, 'Administer the oath.' But not being disposed to take the oath with so little consideration, the following dialogue took place:

P. My Lords, previous to taking an oath, I must beg to be informed on what points I am to be examined?

Mr. Pitt (*in a softened tone*). That, Mr. Parkinson, is impossible.

A. My reason for asking that request is, because if I am to be examined respecting the business of Smith, Le Maitre, Higgins, and Upton, I shall, with the utmost willingness, deliver my testimony on oath; but if my examination is to extend to any other matters, I must decline the oath.

Mr. Pitt. It is not in your power, nor is it in ours. Mr. [37] Parkinson, to make such a distinction. You are here to answer certain questions respecting *matters of the highest importance to the state*, in which any reservation on your part will at least be highly improper.

Mr. Atty. Gen. Consider, Sir, you are now before the *highest court* in this kingdom.

A. If I thought your Lordships would confine your interrogatories to the business of the *pretended plot*, I should be ready to take the oath directly.

Mr. Pitt. Then I will tell you, Mr. Parkinson, that the business on which you were required to attend is that of Mr. Upton's; but your own good sense will tell you that in the performance of our duty, we cannot engage to confine our questions to any specific matter; since that may arise, in your answers, which may render it necessary to put such questions as may not appear to apply immediately to that business.

A. Well, my Lords, as it is on the business of Upton on which I am to be examined, I am ready to take the oath, your Lordships allowing me to object to certain questions.

Aye, aye, very well, very well, was heard from every part of the table. The Attorney General saying in a very low tone of voice, 'You will not be asked to criminate yourself.' To which I answered in the same tone, 'There is no question you can put can produce an answer to criminate me.'

The oath being administered, after some unimportant questions, Mr. Pitt asked, Do you know Smith?

A. I do.

Mr. Pitt. How long have you known him?

A. I believe about two years. I was proceeding, when Mr. Pitt said, Speak slower, Mr. Parkinson, so that the clerk may take down your words.

A. If you please, Sir. But I think I could suggest a better mode of examination to their Lordships.

Mr. Pitt. Ha! What—what is that?

A. That your Lordships will allow me to give you an uninterrupted detail of what I know, subject to your subsequent examination. I am sure it will save both your Lordships and myself much time and trouble.

Mr. Pitt. Very proper, Sir; we shall be much obliged to you.

All their Lordships assenting, I proceeded to inform them of what had come to my knowledge, in nearly these words.

* * * * *

Mr. Atty. Gen. When did you see Hodgson?

A. Last night.

Q. Where did you see him?

[37] Mr. Pitt. What do you mean, Sir, you must answer the question?

[38] A. This question, any more than many others I have already answered, can have no reference to the pretended plot.

Mr. Pitt. That does not signify; you are bound by the oath you have taken to answer it. To Mr. Fawkener. Read the oath. (The oath read.)

Mr. Atty. Gen. You perceive, Sir, you have sworn to true answer make to such questions as shall be put to you respecting certain matters before this board.

A. But it was surely agreed that I was to object to certain questions.

Mr. Atty. Gen. Yes, to such as might criminate yourself, and to those only.

Mr. Pitt (with great petulance). Repeat the question and take down his answer.

Mr. Atty. Gen. Choose whether you will answer the question, or take the consequences of a refusal.

Mr. Pitt. Aye! Aye!

Mr. Atty. Gen. Now, Sir, where did you see Hodgson?

A. I wish not to behave with incivility towards your Lordships. But I must say, and that not without considering my answer, that I am used exceedingly ill.

Mr. Pitt. What can you mean, Sir; by whom?

A. By this Board. My Lords, I understood I was to be interrogated respecting one particular matter, and the question now put can have no reference to it.

Mr. Pitt. Sir, you cannot object to this question?

A. I conceive that I *can*, and *do* on this ground also—that you ought not to put such questions, the refusing to answer which will imply crimination.

Mr. Atty. Gen. Sir, you must answer the question.

One of their Lordships. Unless it will criminate yourself.

A. My Lords, my legal knowledge is but very trifling; it chiefly consists in knowing what was crime a few years ago; but from the extraordinary circumstances I have lately observed, I know not what may be now deemed crime or not. On that ground also I object to answering this question.

Mr. Atty. Gen. Then, Sir, you know that a bill was found yesterday, for High Treason against Hodgson, by a Grand Jury of his countrymen?

A. I learned so from the public papers, and indeed, from himself.

Mr. Atty. Gen. Now, Sir, if after that you conceal him, you are guilty of Misprision of Treason.

A. That, Sir, I am aware of.

Mr. Atty. Gen. Now, Sir, answer the question; but you are [38] not wished to criminate yourself.

A. Then, I saw him *in my own house*.

Mr. Atty. Gen. At what time?

A. About eleven in the evening.

Q. What did he come about?

A. Nothing particular; he laughingly told me of the bill found against him.

Q. At that time of night—you think that was late, don't you?

A. No.

Q. Why, he did not come to you in the way of your profession, did he?

A. No.

Q. Why, do you have visitors even at that late hour?

A. Yes, often my Lords, I sit up late.

Q. How long did he stay?

A. About ten minutes.

Q. What place had he been at last before you saw him?

A. Must I answer that question?

Mr. Atty. Gen. Yes, certainly.

A. At a public house.

Q. Where, there are many public houses?

A. In Shoreditch.

Q. Whereabouts, Shoreditch is a large place, is it not?

A. Near the church.

Q. Near the church, Sir; but what sign was it?

A. Am not quite sure; it was a public-house facing the church.

Q. Why, is there more than one?

A. Yes.

Mr. Pitt. What sign do you suppose it was, Mr. Parkinson?

A. I think it must have been either the King's Arms, or the Star and Garter. (Here Mr. Pitt wrote down a few words on a slip of paper, and carried them out of the room.)

Q. Do you know where he is now?

A. No.

Q. Do you know where we can find him?

A. No.

* * * * *

Q. Pray, Sir, did you ever see one of these pamphlets?

(*The Vindication of the London Corresponding Society.*)

A. Yes, my Lords.

Q. Do you know the author?

A. Exceedingly well.

Q. Who is the author?

A. I object to the question.

[38] Q. You cannot object to it unless it will criminate yourself.

—Who is the author?

A. I object to the question.

(One of their Lordships to Mr. Fawkener.—Put down—
Refuses to answer, *because* it will criminate himself.)

Irritated by this attempt to foist the words of another into
my examination, I struck my hand on the table and said,—My
Lords, I claim that no words be inserted in my examination as
my answers but what proceeds from my own lips—I gave no
such reason.

(Another of their Lordships. Only put down refuses to answer
this question.)

A. The question, my Lords, is not in itself worth contention.
If put again I will answer it.

Q. Who is the author?

A. I am the author.

Q. You are the author?

A. I am the author.

Q. And pray, was this intended to be published before the
trials?

A. It was.—But on its being suggested, I believed by myself,
that it might be not proper, it was resolved it should not, the
press was therefore stopped.

Q. How many were printed then?

A. Only two hundred and fifty.

Q. How many had been intended?

A. I think two thousand.

This letter also shows that Parkinson wrote to the Privy
Council in behalf of one of the accused, John Smith, who had
been thrown into Newgate prison on the treason side, and who
though ill at the time was left exposed to wet and cold in a
most atrocious manner and consequently became seriously ill.
As a result of Parkinson's intervention, Smith was moved into
more tolerable apartments and was given medical attendance.

Though an agitator and reformer, Parkinson found great
fascination in geology and even more particularly in the study
of paleontology and oryctology. Little was known of these
sciences in England at that time, but he entered this field with
keen interest and enthusiasm. He became one of the original
[39] members of the London Geological Society, his attention being
chiefly centered in the study of the organic remains of former
ages as they existed in the various strata in and around Lon-
don. He was an enthusiastic student and collector. His

collection grew and became famous, and he contributed numerous articles to the leading scientific journals. His knowledge of and interest in these subjects is shown in his important work entitled "Organic Remains of a Former World." This consists of three large volumes, which it took him several years to prepare, the first volume appearing in 1804, the second in 1808, and the third in 1811.

In 1822 he published "Outlines of Oryctology," or an introduction to the study of fossil organic remains. This is a book of 340 pages which served for some time as a text book. It passed through three editions. From a study of the title page we see that Parkinson was a member not only of national but of foreign geological societies.

The importance of his contributions to geology, paleontology and oryctology is proven by citations from the writings of one of England's greatest paleontologists who wrote half a century later. In 1850 Mantell published "A Pictorial Atlas of Fossil Remains," which consisted of illustrations selected chiefly, he tells us, from Parkinson's "Organic Remains of a Former World." In the introduction Mantell says:

The publication of Mr. Parkinson's 'Organic Remains of a Former World' at the commencement of the present century must be regarded as a memorable event in the history of British paleontology. It was the first attempt to give a familiar and scientific account of fossil relics of animals and plants accompanied by the figures of the specimens described.

The three volumes of which the work consisted appeared at considerable intervals; the last was published in 1811, although nearly forty years have since elapsed and hundreds of geological works of all kinds and degrees of merit have subsequently been issued, Mr. Parkinson's plates, owing to their fidelity and beauty, are still in such request as to induce the proprietor, Mr. Bohn, now that the work is out of print, to publish them, with the descriptions and modern names of the fossils represented.

Chemistry also proved an attraction to him and he seems to have foreseen its wonderful possibilities in relation to scientific medicine. He studied chemistry for its own sake as well as for its application to medicine. The results of his study took tangible form and appeared in a little book en-

[39] titled "The Chemical Pocket-book" ² which represented the inorganic and physiological chemistry of that day.

His remarks on caloric are of interest, as showing how intelligent and well informed he was for his time. He says:

Heat, with the various changes produced by it in bodies, is considered by some, as merely the consequence of certain mechanical changes in bodies, but it is most generally supposed that these effects depend on a certain matter called caloric or the matter of heat.

Caloric appears to be an highly elastic imponderable fluid, and is so very subtle, that neither has its gravity been yet ascertained, nor its existence, in a simple and uncombined state been shown. It combines chemically with all bodies, in a quantity proportioned to their affinity with it. By its elastic power it constantly tends to separate the particles of matter in which it is opposed by the attraction of cohesion, hence attraction of cohesion predominating the body exists in a solid form, caloric existing in such a proportion as to weaken the attraction of cohesion to a certain degree, the body assumes a liquid form, and when the quantity of caloric is increased still further, the body takes a gaseous form.

It constantly tends to form an equilibrium, by passing from bodies of an higher, and diffusing itself through bodies of a lower temperature.

* * * * *

² *The Chemical Pocket-book; or Memoranda Chemica*; arranged in a Compendium of Chemistry, with tables of attractions, etc. Calculated as well for the occasional reference of the professional student as to supply others with a general knowledge of chemistry, by James Parkinson, with the latest discoveries, from the London second edition of 1801, to which is now added An Appendix containing the principal objections to the antiphlogistic system of chemistry, by James Woodhouse, M. D., professor of chemistry in the University of Pennsylvania, etc. Philadelphia. Printed and sold by James Humphreys, at the N. W. corner of Walnut and Dock St., 1802. First American edition, 1799. On its last page is the following announcement:

Dr. Woodhouse's Lectures on Chemistry commence on the first Tuesday in November of every year, in the city of Philadelphia, and end on the last day of February.

He possesses a complete chemical apparatus, and during the course, several thousand brilliant experiments are exhibited.

Specimens of the various earths, salts, ores of metals, etc., are shown to the class.

Count Rumford, from the great quantity of heat produced [39] by friction, is induced to ask, What is heat? Is there any such thing as the aqueous fluid? Is there anything that can with propriety be called caloric? He observes the source of heat generated by friction appears evidently to be inexhaustible, and adds, that anything which any insulated body, or system of bodies can continue to furnish without limitation, cannot possibly be a material substance.

Heat, Mr. Davy says, or that power which prevents the actual contact of the corpuscles of bodies, and which is the cause of our peculiar sensations of heat and cold, may be defined as a peculiar motion, probably a vibration of the corpuscles, tending to separate them. It may with propriety be called the Repulsive Motion. The non-existence of caloric or fluid of heat, he thinks his experiments have proved.

Dr. Beddoes is also of the opinion that most of the phenomena relative to heat, are more readily reconcilable to the mechanical than to the chemical doctrine of heat.

In this chemistry he describes the character of the elements, their compounds, etc., in the ordinary text-book style; and the last thirty pages are devoted to the physiological chemistry of "Animal Substances," such as the blood, gastric and other internal juices, and secretions of the body, bones, teeth, shells, eggs and feathers of birds, etc., etc.

The small volume was apparently very popular, for it ran through several English and American editions.

An entirely different side of his life is revealed in a book entitled "Dangerous Sports"—a tale addressed to children warning them against wanton, careless or mischievous exposure to situations from which alarming injuries so often proceed." This to the writer appears as the most peculiar of all his writings. The title might better have been "Don'ts [40] for Children." The advice consists of a succession of "don'ts," frequently repeated, with examples appended of disastrous results accruing from a failure in the past to observe the cautions and precautions laid down by the story-teller.

The reader is introduced to an old cripple called Millson who finds a child terribly hurt from an accident which occurred as a result of boys throwing stones at the horse upon which the child had been riding. Millson looks after the

³ The first edition was published in 1800, the second in 1808.

[40] child and returns him to his home, for which he enjoys the gratitude of both the child and parents. The writer then warns boys never to scare a horse or to throw stones at one, particularly when anyone is riding it. He also warns children not to strike strange dogs and tells them how best to meet an attack of a ferocious dog.

The next part in which he represents a house-party for children to which old Millson is invited is still more peculiar. Old Millson appoints himself professor of sport and undertakes to teach the children how to play without exposing themselves to danger and how they ought to enjoy themselves by learning something of electricity or by magic lantern pictures, etc.

The plan of teaching is as follows: One of the party does something which exposes someone to danger, whereupon old Millson calls them all together and then relates the incident, drawing morals for them. Next he tells them a story of a similar action with a very disastrous ending and then tells them not to do it again.

The subjects with which old Millson deals include all the things which add spice to the life of a child. He advises the boys never to stand too close to the batter in a cricket game, never to climb trees or rob birds' nests, never to risk life or limb in playing stump or follow the leader, never to throw stones or go swimming in deep water, never to go out on thin ice, or to play with pistols or even with bow and arrows, never to close a penknife against the thigh, to taste unknown substances or to cut the end off of a cripple's crutch, etc. Intended to entertain children, one can imagine how they must have enjoyed it! The book doubtlessly found more favor among parents. Certainly the advice contained in it would never develop the best part of a boy's nature, and if accepted would certainly rob the world of all its Tom Sawyers.

The son of a doctor, reared in the home of a practicing physician, Parkinson entered the profession with a full knowledge of what the practice of medicine meant and of the nature of the life of a general practitioner. In his early life he studied shorthand, which proved later of great service to him

in the course of his studies. After graduation he still con- [40] tinued to be a student, taking courses in those branches which particularly appealed to him, for he was ambitious. A careful student of the philosophy and progress of his age, a trained thinker, he did not accept as truth anything lacking in scientific proof, entering into many arguments and controversies with his contemporaries.

The fact that he was a fellow of the Royal College of Surgeons stamps him as a man of learning and of standing in the profession; while the large number of his publications bears witness to his industry.

A most peculiar side of his nature is revealed in the publication of medical books for the laity which somewhat resemble the household medical books or home practitioners of today. It is difficult to understand why he wrote them. The prefaces and introductory remarks pretend to convey his reasons to the reader but these impress one as being exceedingly apologetic in nature, as though the author felt some compunction concerning the publication of these works and found it difficult to convince himself by arguments that it was absolutely proper and advisable that he should publish them. Whatever his feelings were, the books did appear.

Hints for the Improvement of Trusses⁴ is a pamphlet of twenty-two pages. The author offers some original ideas as to home methods that may be used to keep a hernia in place. He gives as his reason for writing this book that he does not believe in exclusive patents and wants to make the idea widespread for general use by the poor.

Possessing these sentiments respecting the reservation of exclusive property, in those discoveries which conduce to the preservation of life, and the diminution of disease, it was sufficient to believe it possible, that the present little improvement might, eventually, prove beneficial, to produce such a publica-

⁴ Hints for the Improvement of Trusses intended to Render their Use less inconvenient and to Prevent the Necessity of an Understrap, with the Description of a Truss of Easy Construction and Slight Expense for the Use of the Labouring Poor, to whom this little tract is chiefly addressed. By James Parkinson. Hoxton. Price nine pence. 1802.

[40]tion of its description, as might prevent anyone assuming the principle as their discovery, for the purpose of obtaining an exclusive patent. By stating this, however, it is not meant to arrogate the merit of a very important discovery, it is merely offered as a hint, which may probably suggest means of relief, easy of acquisition, in a disease in which, if these or similar means be omitted, a fatal termination may be expected to occur. A hope is also entertained that the principle, capable of being further extended, may, under the attention of the ingenious mechanic, or even of the patient himself, be so modified, as to be applied to the construction of an instrument, still more simple and more efficacious than any which have been, as yet, adopted.

The occasion for the appearance of a book entitled "Mad Houses" ⁵ was a series of attacks by newspapers and by one "short-lived medical newspaper" against him for his seeming neglect before signing the papers which committed Mary Daintree to confinement for insanity. In this pamphlet of thirty-eight pages he discusses first, the laws for confinement, then shows their weak points and suggests ways of remedying their shortcomings.

The miseries of any one unnecessarily consigned to the horrors of a mad-house, and the state of the unhappy lunatic, whose [41] privation of reason leaves him without the power of complaint against those, who, false to their trust, may augment instead of diminish his sufferings, alike excite our commiseration. We cannot, therefore, but look with gratitude to the labours of those who brought forward that act, the objects of which are, the regulation of mad-houses, the admission of patients, and the visitation of these houses and patients by proper persons.

But here, as in many other instances, the first endeavors of benevolence have not been fully successful. Although the grand points, which the authors of the bill had in view, are in a great measure obtained, other less evils remain unabated, and some exist which are the consequence of imperfections in the bill itself. To point out these evils, and to endeavor to trace them to their true source, and to suggest means by which they may be removed or lessened, are the objects of the present attempt.

⁵ Mad Houses. Observations on the act regulating mad-houses and a correction of the statements of the case of Benjamin Elliott, convicted of illegally confining Mary Daintree, with remarks addressed to the friends of insane persons. By Jas. Parkinson. 1811.

In the last ten pages he goes over his evidence given at the [41] trial of relations who were instrumental in the commitment of Mary Daintree, confined for three months in a madhouse, from which it would appear that he had fully done his duty and that he was justified in signing the bill of commitment. It appears that his evidence was wrongly quoted in the newspaper and as he did not take the trouble to correct this paper it was quoted by other papers and severe criticism had been passed on his conduct in the affair.

Parkinson states in the trial that he is visiting surgeon of the madhouse. This publication appeared two months after the trial and was sold to the public for two shillings.

Probably the most interesting part of his book entitled "Medical Admonitions" ⁶ is the introduction to the table of symptoms, in which the author outlines his position and offers a reason for undertaking the publication of a book on medicine intended for circulation and use among the laity. He says:

Should any one obstinately put to sea without a compass to steer by and without any knowledge respecting the navigation of a ship, but what he picks up during his voyage, by reference to some treatise on navigation, it would not be sufficient, merely to endeavor to dissuade him from making the rash attempt. But if he persist, every profitable assistance should be yielded him, the perils he has to shun should be clearly pointed out, the different rocks and quicksands he is to avoid should be marked, and the different circumstances should be described which may show his near approach to danger. With a similar intention is the following table given.

Then follows a list which includes every conceivable symptom, what the purport of these symptoms may be and sug-

⁶ Medical admonitions to families respecting the preservation of health and the treatment of the sick. Also a Table of Symptoms serving to point out the degree of danger and to distinguish one disease from another, with observations respecting the improper indulgence of children. By James Parkinson, M. D. Hoxton. First American from the fourth English edition. 1803.

There were five editions of this work published between 1799 and 1809.

The volume that I was privileged to see was from the library of Dr. Pierre Chatard and was the gift of Dr. Ferdinand E. Chatard to the library of the Johns Hopkins Hospital.

[41] gestions as to the seriousness of the case. This occupies some forty-three pages.

This book like so many of the Home Practitioners is a brief, concise picture of different diseases, with an outline of treatment, and a statement as to the gravity, etc. It comprises about 500 pages and deals with nearly all the recognized medical diseases.

In "The Villagers' Friend" ⁷ he represents himself as an old practitioner who has been the village apothecary for thirty years, during which time he has labored long and hard and has received little in return, and now in his old age he is poored than when he started practice. He is leaving practice to devote the remainder of his days to some rustic employment. In parting he advises his old friends and patients. The reader is reminded of how little the public has considered the comfort or pleasure of its physician, of the nights spent in buffeting stormy elements in response to urgent calls for which no necessity existed, and he tries to inculcate some consideration on the part of the reader for the comfort and well being of the physician of the future. He deals with the value of exercise as a therapeutic measure, warns against the dangers of drink, advises thrift but not overwork. Bathing is advocated as a prophylactic measure, but not a cure for disease, for he is afraid of its employment during the course of disease.

Throughout this volume the Friend delights to use proverbs and Parkinson here really appears as a medical Sancho Panza. The book was very highly recommended by the press in general and by several medical journals, for example, the Medical and Physical Journal, The London Medical Review and Magazine, and Medical and Chirurgical Review.

Our greatest interest, however, is centered in his contribu-

⁷ The Villager's Friend and Physician, or a familiar address on the preservation of health, and the removal of disease, on its first appearance; supposed to be delivered by a village apothecary; with cursory observations on the treatment of children, on sobriety, industry, etc., intended for the promotion of domestic happiness. By James Parkinson. 1800. Small volume of 85 pages. Cost 1 shilling.

tions to medicine itself. What did he do that appealed to the [41] profession? What did he contribute to medical science?

Gout in his day was the same difficult but attractive problem that it is today. It was known to be in some way associated with uric acid. It appealed from the chemical side to him and also from the side of treatment probably, as he himself was a sufferer from this disease.

Parkinson had some ideas concerning gout, its cause and treatment, and he was very definite about them. Another gentleman, Dr. Kinglake, equally confident also had ideas on this subject and had written a large book on the subject. Parkinson's ideas, however, did not exactly coincide with those of Kinglake, so that gout furnished then, as it can now, an excellent subject for a controversy.

In 1805 his book entitled "Observations on the Nature and Cure of Gout" ⁸ appeared. Parkinson states in the preface that he had frequently felt urged to write on this disease, from which he himself had suffered so greatly, but for various reasons he had not done so. "But the perusal of Dr. Kinglake's 'Dissertation on Gout'" determined my intentions. [42] Strongly suspecting that the advice delivered in that work, with so much benevolence and zeal, must in many instances prove highly injurious, and believing that the observations which I had made might serve to prevent too general an adoption of that advice, I resolved on their publication."

It is interesting to note that he advises against the use of the Duke of Portland powder and quotes Cadagon who says, "I myself observed between fifty and sixty of its advocates, some my patients, some my acquaintances or neighbors, who were apparently cured by it, but in less than six years' time *'omnes ad internencionem cæsi,'* they all died to a man." He also quotes Cullen who said that in every instance which he had known of the exhibition of this medicine for the length of time prescribed, the persons who had taken it were indeed afterwards free from any inflammatory affection of the joints,

⁸ Observations on the nature and cure of gout, etc. 8°. London.
N. D. Symonds, 1805.

⁹ A dissertation on gout, etc. 8°. London. J. Murray. 1804.

[42] but they were affected with many symptoms of the atonic gout, and all, soon after finishing their course of the medicine, have been attacked with apoplexy, asthma or dropsy, which proved fatal. He strongly criticises Dr. Kinglake's writings and states that application of cold produces irregular or retrocedent gout (in the viscera), which is more to be dreaded than joint gout. Indeed in the irregular form of gout fermented liquors were administered in order to increase it to such an extent that the joints would become affected and the disease become localized and leave the internal viscera free.

In one part he refers to the observation of Heberden,¹⁰ "The doctor speaks of these tumors, as existing only on the third joints of the fingers which may be accounted from the circumstance of their almost always making their first appearance on these joints, some months and even sometimes years elapsing before they appear on the second series of joints. Although it is undoubtedly a fact, that they are often to be found on those persons to whom gout is unknown, yet they often exist where gout has manifested itself, in some slight attack, at some former period." Parkinson also says they may be painful. He evidently does not distinguish between gout and arthritis deformans or hypertrophic arthritis, for he says that "the disease noticed by Dr. Heberden is the same to which this chapter is devoted."

Two years following the appearance of Parkinson's book on gout, Kinglake retaliates with another pamphlet.¹¹

In the preface Kinglake states that the contents of this work were originally intended for another volume which was a reply to the hosts of criticisms mostly anonymous, but "Mr. Parkinson's manly and open criticism was worthy of separate reply."

¹⁰ *Commentarii de morborum historia et curatione.* 8°. London. T. Payne. 1804.

¹¹ *Strictures on Mr. Parkinson's observations on the nature and cure of gout, recently published in opposition to the theory, that proposes the cooling treatment of that disease: to which are added in an appendix two letters addressed to Dr. Haggarth, containing remarks on the opinions he has lately published, on acute rheumatism, the use of cinchona or Peruvian bark in that disease, and on what he terms "nodosity of the joints."* 8°. Taunton. J. Poole. 1807.

Each part of Mr. Parkinson's book which deals with fundamental principles, of the cause and treatment of gout, is taken up and discussed. [42]

Mr. Kinglake does not agree with the chemical theory but he speaks of "its practical importance, were it capable of being established." He becomes sarcastic, "but it would seem that the respective discoveries of Scheele, Forbes, Pearson, Fourcroy and Wollaston attracted the admiration of Mr. Parkinson, and induced him to meditate the fabrication of a theory of gout, more chemical, more scientific, more worthy the suffrages of the learned world, and perhaps more politic, too, than any view of the disease possibly could be, that would authorize the topical use of cold water." He scores heavily on Parkinson who thinks that wine and punch, not beer and malt, are the greatest exciting etiological factors, when he observes that he has found gout more prevalent in those who from habit or preference use malt liquor for common beverage.¹²

Kinglake criticises very strongly the interpretation placed on observations made by Parkinson, ridicules his array of cases in which the harmful effect of the application of cold are detailed (only one of which was treated with cold and here the result was good and the symptoms appearing a year later cannot possibly be the result of the treatment given). "Less integrity and more art might have given them a more imposing appearance, but Mr. Parkinson's regard for truth has conferred on them no more than their real value."

He ends by complimenting Parkinson on his book. "It would be tacit detraction in me to terminate my strictures on Mr. Parkinson's work, without acknowledging it to be on the whole a medical performance of the first class of respectability. Although indeed, it is not in my power to assent to the hypothesis it contains, it is but just to say, that like the author's other publications, it at once abounds with proof of reputable talent and of an amiable disposition to benefit mankind."

¹² In treatment Parkinson advises the total avoidance of fermented liquors except in atonic gout.

[42] The library of the British Museum contains a small work entitled "Observations on Dr. Hugh Smith's Philosophy of Physic." This was published in 1780, and has always been ascribed to Parkinson. On the fly leaf is written "From the author with his most respectful compliments." The "Observations" are addressed to Hugh Smith, M. D. of Hutton Street. "These observations, Sir, are dedicated to you, with that earnestness, which the subject demands, that deference, which is due you, and that diffidence, which ought to accompany an opposition to opinions, which are said to be founded on experiments and confirmed by physiological researching and the closest method of reasoning."

"By their fruits ye shall know them." Although written anonymously, this is almost certainly Parkinson's work. The method of presenting the subject matter, the arguments themselves, and the style of speech are strikingly suggestive. The preface and introduction, full of compliments and praise for Dr. Smith and the unsparing attacks on Smith's work itself, [43] have their analogue in Mr. Parkinson's attitude toward Kinglake in "Observations on the Nature and Cure of Gout."

The first chapter is devoted to refuting Smith's definition of a gland and to a discussion of so-called "Vital Air," which according to him is responsible for the circulation of the blood. Parkinson can see no difference between ordinary air and vital air and denies that it has anything to do with circulating the blood.

He shows that Dr. Smith has gone at great length into a contraversion of Boerhaave's theory of circulation which, Parkinson says, for thirty years has not been accepted by leaders in medicine. Smith had attacked it as though it still was standing and gave no credit to Cullen and others who had refuted it in part. Parkinson recalls all this and then discusses some of Smith's criticisms which he says have not attacked the theory in its assailable parts but in the parts where it stands firm and is still accepted. He says also that Smith has not interpreted Boerhaave properly. Smith claimed that he had experimental proof that heating of air in fluid in close confinement in tubes caused circulation.

Parkinson asks him for demonstrations or for records of such [43] experimental proof.

In observations of the second chapter of "Philosophical Inquiries" it is shown that Boerhaave claimed that "the air by distending the vesicles of the bronchi compresses the veins in inspiration and hence the air cannot, at this time, gain entrance into the pulmonary veins."

Smith claimed that "the power of any given quantity of air is abated in proportion as it is divided and subdivided into parts that are asunder from each other," and that "the innumerable cells of the bronchi seem admirably contrived by the author of nature to prevent this compression."

Parkinson says that this idea is false, as air in subdivision is exposed to a much greater heating surface and consequently expands more rapidly and exerts more compression than if it were not distributed to the various vesicles and alveoli.

He also rejects on physical grounds Smith's idea that a cutaneous respiration exists—Smith claiming that the vital air is increased by heavier air entering through the skin and lighter air and excrementous fluids passing out through it at one and the same time.

The "Hunterian Reminiscences"¹² are doubly interesting because they reveal the opinion of Parkinson concerning Hunter and furnish us with a full set of Hunter's lecture notes.

PREFACE.—To those gentlemen who have been instrumental, by their solicitations, to the production of this work, and who are aware of the motives which induced the editor to present it to his medical brethren, any preface or introduction may appear uncalled for, if not superfluous. But by those who have the good fortune to be now commencing the study of their profession under the direction of the enlightened professors of the present day, not only in every branch of medicine, but in every science associated with it, a few prefatory observations may be deemed réquisito; for to them the necessity or utility of publishing the

¹² Hunterian Reminiscences being the Substance of a Course of Lectures on the Principles and Practice of Surgery delivered by the late Mr. John Hunter in the year 1785. Taken in short-hand and afterwards fairly transcribed by the late Mr. James Parkinson. Edited by his son, J. W. K. Parkinson, F. R. C. S., Lond.

[43] substance of lectures delivered half a century ago may not be apparent.

Nor is the absolute necessity or utility contended for: no more would it be necessary to examine the foundation of a building, every part of whose superstructure bespeaks its stability; yet it is pleasing, nay, highly interesting, occasionally to descend from the height to which modern surgery has attained, and carefully retrace each step, until we arrive at the very base on which it rests, every stone of which may be said to be inscribed with the name of John Hunter, for not only did he supply the materials, and work them with his own hands; but, if proof were wanting of how much he left wherewith to adorn the superstructure, let us visit the far-famed Hunterian Museum, where we may take our stand, and exaltingly exclaim 'Si monumentum quaeras, circumspice.'

* * * * *

With all its faults, for many of which the Editor holds himself personally accountable, he trusts the work will, in some measure, supply the loss which surgical science has sustained by the destruction (by accident it is to be hoped) of the original notes from which Mr. Hunter lectured. With this view alone does he deliver it into the hands of a learned and liberal profession, to be dealt with according to its merits.

In 1817 he wrote his "Essay on Shaking Palsy."¹⁴ This constitutes his greatest and most important contribution to medicine. It alone is responsible for the handing down of his name to posterity and without it, his name would have died with him.

In the preface he states:

The disease, respecting which the present inquiry is made, is of a nature highly afflictive. Notwithstanding which, it has not yet obtained a place among nosologists; some have regarded its characteristic symptoms as distinct and different diseases, and others have given its name to diseases differing essentially from it; whilst the unhappy sufferer has considered it an evil, from the domination of which he had no prospect of escape.

The disease is of long duration: to connect, therefore, the symptoms which occur in its later stages with those which mark its commencement, requires a continuance of observation of the same case, or at least a correct history of its symptoms, even for several years. Of both of these advantages the writer

¹⁴ An essay on shaking palsy. 8°. London. Sherwood, Neely & Jones. 1817.

has had the opportunity of availing himself; and has hence been [43] led particularly to observe several other cases in which the disease existed in different stages of its progress.

His definition of the disease is as follows:

Involuntary tremulous motion, with lessened muscular power, in parts not in action and even when supported; with a propensity to bend the trunk forwards, and to pass from a walking to a running pace: the senses and intellects being uninjured.

He credits Galen with having distinguished two forms of tremor, one which occurs during attempts at movement, and the other while the parts are at rest, to the latter of which the term palpitation was applied. Sylvius de la Boë, Juncker, Cullen and Sauvages are also credited with distinguishing various forms of tremor. "Tremor has been adopted, as a [44] genus, by almost every nosologist; but always unmarked in their several definitions, by such characters as would embrace this disease."

The following quotation is somewhat long but the description of the disease is so good that it should be better known by physicians, and we therefore venture to reprint it:

So slight and nearly imperceptible are the first inroads of this malady, and so extremely slow is its progress, that it rarely happens, that the patient can form any recollection of the precise period of its commencement. The first symptoms perceived are a slight sense of weakness, with a proneness to trembling in some particular part; sometimes in the head, but most commonly in one of the hands and arms. These symptoms gradually increase in the part first affected; and at an uncertain period, but seldom in less than twelve months or more, the morbid influence is felt in some other part. Thus assuming one of the hands and arms to be first attacked, the other, at this period becomes similarly affected. After a few months the patient is found to be less strict than usual in preserving an upright posture: this being most observable whilst walking, but sometimes whilst sitting or standing. Sometime after the appearance of this symptom, and during its slow increase, one of the legs is discovered slightly to tremble, and is also found to suffer fatigue sooner than the leg of the other side: and in a few months this limb becomes agitated by similar tremblings, and suffers a similar loss of power.

Hitherto the patient will have experienced but little inconvenience; and befriended by the strong influence of habitual

[44] endurance, would perhaps seldom think of his being the subject of disease, except when reminded of it by the unsteadiness of his hand, whilst writing or employing himself in any nicer kind of manipulation. But as the disease proceeds, similar employments are accomplished with considerable difficulty, the hand failing to answer with exactness to the dictates of the will. Walking becomes a task which cannot be performed without considerable attention. The legs are not raised to that height, or with that promptitude which the will directs, so that the utmost care is necessary to prevent frequent falls.

At this period the patient experiences much inconvenience, which unhappily is found daily to increase. The submission of the limbs to the directions of the will can hardly ever be obtained in the performance of the most ordinary offices of life. The fingers cannot be disposed of in the proposed directions, and applied with certainty to any proposed point. As time and the disease proceed, difficulties increase: writing can now be hardly at all accomplished; and reading, from the tremulous motion, is accomplished with some difficulty. Whilst at meals the fork not being duly directed frequently fails to raise the morsel from the plate, which, when seized, is with much difficulty conveyed to the mouth. At this period the patient seldom experiences a suspension of the agitation of his limbs. Commencing, for instance in one arm, the wearisome agitation is borne until beyond sufferance, when by suddenly changing the posture it is for a time stopped in that limb, to commence, generally, in less than a minute in one of the legs, or in the arm of the other side. Harassed by this tormenting round, the patient has recourse to walking, a mode of exercise to which the sufferers from this malady are in general partial; owing to their attention being thereby somewhat diverted from their unpleasant feelings, by the care and exertion required to ensure its safe performance.

But as the malady proceeds, even this temporary mitigation of suffering from the agitation of the limbs is denied. The propensity to lean forward becomes invincible, and the patient is thereby forced to step on the toes and forepart of the feet, whilst the upper part of the body is thrown so far forward as to render it difficult to avoid falling on the face. In some cases, when this state of the malady is attained, the patient can no longer exercise himself by walking in his usual manner, but is thrown on the toes and forepart of the feet; being at the same time, irresistibly impelled to take much quicker and shorter steps, and thereby to adopt unwillingly a running pace. In some cases it is found necessary entirely to substitute running for walking; since otherwise the patient, on proceeding only a very few paces, would inevitably fall.

In this stage, the sleep becomes much disturbed. The tremulous motion of the limbs occur during sleep, and augment until they awaken the patient, and frequently with much agitation and alarm. The power of conveying the food to the mouth is at length so much impeded that he is obliged to consent to be fed by others. The bowels, which had been all along torpid, now, in most cases, demand stimulating medicines of very considerable power: the expulsion of the faeces from the rectum sometimes requiring mechanical aid. As the disease proceeds towards its last stage, the trunk is almost permanently bowed, the muscular power is more decidedly diminished, and the tremulous agitation becomes violent. The patient walks now with great difficulty, and unable any longer to support himself with his stick, he dares not venture on this exercise, unless assisted by an attendant, who walking backwards before him prevents his falling forwards, by the pressure of his hands against the forepart of his shoulders. His words are now scarcely intelligible; and he is not only no longer able to feed himself, but when the food is conveyed to the mouth, so much are the actions of the muscles of the tongue, pharynx, etc. impeded by the impaired action and perpetual agitation, that the food is with difficulty retained in the mouth until masticated; and then as difficultly swallowed. Now also, from the same cause, another very unpleasant circumstance occurs: the saliva fails of being directed to the back part of the fauces, and hence is continually draining from the mouth, mixed with the particles of food, which he is no longer able to clear from the inside of the mouth.

As the debility increases and the influence of the will over the muscles fades away, the tremulous agitation becomes more vehement. It now seldom leaves him for a moment; but even when exhausted nature seizes a small portion of sleep, the motion becomes so violent as not only to shake the bed-hangings, but even the floor and sashes of the room. The chin is now almost immovably bent down upon the sternum. The slops with which he is attempted to be fed, with the saliva, are continually trickling from the mouth. The power of articulation is lost. The urine and faeces are passed involuntarily; and at the last, constant sleepiness, with slight delirium, and other marks of extreme exhaustion announce the wished-for release.

Histories of six cases are given; the subject in each instance being a man of advanced age—in the five cases in which the age is mentioned the patient being above fifty years. Only two of the cases are absolutely typical, three others were only met with casually in the street, the opportunity of studying the objective features of the disease having been eagerly seized.

[44] The attitude, the weakness, the tremor and the gait are accurately described, the rigidity is strongly suggested, particularly by one line, "the chin is now almost immovably bent down upon the sternum," while elsewhere the clumsiness and incoordination are more emphasized than is rigidity.

Nowhere in this essay is a description of the "mask" face—the so-called Parkinson face—encountered. It is possible that later he drew attention to the "mask" face but certainly no justification for the term "Parkinson's mask" can be found in his original essay.

Attention is called to the fact that the festinant gait (*scelotyrbe festinans*) had been previously noted and described by Carguet, by Gaubius and by Sauvages, although its association with the other symptoms in the symptom complex had not been recorded.

The question of differential diagnosis from other palsies, from anomalous forms of Jacksonian epilepsy, from hysteria, delirium tremens and tremors incident upon excessive use of tea, coffee and alcohol, is also considered.

In discussing the etiology he offers only apologies, as no autopsy had been made on any of the cases. He hesitatingly advances some conjectures and opinions which he admits are but sorry substitutes for facts, and points out that none of the symptoms of the disease are encountered in patients suffering from compression, laceration or complete division of the spinal cord. He thinks, however, that the seat of the disease is probably in the upper cord and extending as the disease progresses up into the medulla.

It is suggested that early treatment may be able to check the progress of the disease—bleeding, vesicatories and liniments and an issue (he is specific) one and one-quarter inches, at least, in length being advised. He assumes a hopeful attitude for such measures but thinks that internal remedies will be without avail.

The numerous citations from his writings disclose his style more adequately and much better than any description possibly could. One is often tempted to read on not so much because of the matter as because of the somewhat unusual and interesting method in which he reveals his ideas. He is ver-

bacious and his sentences are complicated but readily understood. This peculiarity is common to all his writings. [45]

Much can be surmised as to his personal character from a study of his varied writings. Certain characteristics stand out strongly, his love of controversy, his love of admonishing those about him, his love of freedom of speech and writing, and his deep interest in the various branches of science, as chemistry, geology and medicine. Fortunately all is not left to surmise. Mantell furnishes us with a description of his physical and social nature.

I gladly avail myself of this opportunity to make a passing allusion to the excellent and accomplished author, Mr. Parkinson. I had the pleasure and the privilege of his acquaintance in my youth, immediately after the publication of the third volume of his valuable work. Mr. Parkinson was rather below the middle stature, with an energetic, intelligent and pleasing expression of countenance and of mild and courteous manners; readily imparting information either on his favorite science or on professional subjects; for he was at that time actively engaged in medical practice in Hoxton Square and was the author of several valuable medical treatises. . . .

. . . In after years Mr. Parkinson warmly encouraged my attempts to elucidate the nature of the strata and organic remains in my native county, Sussex, a district which was then supposed to be destitute of geological interest and he revised my drawings and favored me with his remarks on many subjects treated of in my first work.

He also speaks of the attractive style of Parkinson, in proof of which he quotes a whole chapter from one of Parkinson's books on geological subjects.

Parkinson died during his sixty-ninth year on December 21, 1824, in Kingsland Road and was buried on December 29, 1824. Until death he remained a parishioner of Hoxton and was buried in the parish burying grounds, the churchyard of St. Leonard's Shoreditch Church, the entry appearing in the parish register. In later years many of these graves were disturbed, the stones being lost. No stone bearing his name can be found in the old churchyard.

What then did Parkinson accomplish during his life? He cannot be considered a brilliant investigator and certainly he made no startling contributions to science. He was a man of

70th.

[45] the Old Master type described by Holmes rather than the highly specialized scarabaeist. Master of medicine, chemistry, geology, paleontology and oryctology, he was a writer of many textbooks, great as a compilator, keen in observation and desirous of seeing everything named and placed in its proper class. His most important contribution to medicine was the offspring of the last two qualities.

He was a member of the Geological Society of London, the Wernerine Society of Edinburgh, and of the Caesarean Society of Moscow, a Fellow of the Royal College of Surgeons.

'Tis true his chief contribution to medicine consisted simply in describing a disease and giving it a name, thereby establishing it as a clinical entity. It may be argued that he neither discovered its etiology nor found a cure; but the disease has stood an open challenge to investigators for a full century. "Let him that is without sin cast the first stone."

NOTE.

Thanks to Dr. F. H. Garrison, of Washington, D. C., my attention has been called, since the appearance of this paper, to another interesting communication made by James Parkinson as follows:

CASE
OF
DISEASED
APPENDIX VERMIFORMIS
By John Parkinson, Surgeon, Esq.
communicated
By James Parkinson, Esq.

Read January 21, 1812.

A preparation of diseased appendix vermiformis in my possession, was removed from a boy about 5 years of age who died under the following circumstances.

He had been observed for some time, to decline in health, but made no particular complaint, until two days before his death, when he was suddenly seized with vomiting, and great prostration of strength. The abdomen became very tumid and painful upon being pressed: his countenance pale and sunken, and his pulse hardly perceptible. Death, preceded by extreme restlessness and delirium, took place within 24 hours.

Upon examination, the whole surface of the peritoneum was found inflamed, and covered with a thin coat of coagulable lymph; and slight adhesion had taken place between the peritoneum covering the viscera, and the parietes of the abdomen. The viscera, independent of the inflammation of their peritoneal covering, appeared in a perfectly healthy state, excepting the appendix vermiformis of the caecum. No diseased appearance was seen in this part near to the caecum; but about an inch of its extremity was considerably enlarged and thickened, its internal surface ulcerated, and an opening from ulceration, which would have admitted a crow quill, was found at the commencement of the diseased part, about the middle of the appendix, through which it

appeared, that a thin dark coloured, and highly fetid fluid, had escaped into the cavity of the abdomen.

Upon opening the appendix, a piece of hardened faeces was found impacted in that part of it which lay between the opening, and that portion of the appendix, which was not evidently marked by disease.

Dr. H. A. Kelly in his work on "Appendicitis and Diseases of the Vermiform Appendix" refers to this publication as follows:

In 1812 a London physician, Parkinson (Med. and Chir. Trans. Lond., 1812, Vol. 3, p. 57), published the case of a boy of 5, who died of an attack of what was evidently acute appendicitis and autopsy showed a perforation of the appendix. This is the first case in which perforation of the appendix is recognized as the cause of death.

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